METHODS OF TREATING ELECTRODES AND GAS SENSORS COMPRISING THE ELECTRODES

ABSTRACT

A method for forming an electrode comprises: combining a platinum precursor with a gold precursor to form an electrode ink; forming the electrode ink into an electrode precursor; firing the electrode precursor to form the electrode; treating the electrode in an environment having an oxygen partial pressure of less than or equal to 500 ppm oxygen for a period of time sufficient produce an electrode with an exposed surface gold concentration of greater than or equal to about 6 times a bulk gold concentration in the electrode.